

Work Order ID 139981

Wednesday, December 16, 2015 9:09:19 AM

139981

DDP IN CHARGE / ISSUE
TITEL... 10302

DAS 9 9-89

Page 1

Item ID: D5374-3

Accept

N900040100

Setup Start

NS1

Revision ID: PRELIM

Item Name: Bushing

Stop

NS2

Start Date: 12/16/2015 Start Qty: 20.00

20

Cust Item ID:

Required Date: 12/16/2015 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals: Process Plan: MLS

Date: DEC 16 2015

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D5374	PA2

100	Hardinge CNC LATHE SMALL	0.00
100		
Hardinge	Memo	0.01
Hardinge CNC Lathe Small	1-TURN AS PER FOLIO FB445 & DWG D5374	

FOLIO REV: AA

DWG REV: A

2-DEBURR AS REQUIRED

110	QC2- Inspect parts off machine FAI/FAIB	0.00
-----	---	------

110		
QC	Memo	0.00
Quality Control		

20 0

DAS
45
9-89

2015-12-16

20 0

DAS
45
9-89

2015-12-16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ .Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
		OTHER : ☐							

Work Order ID 139981

Wednesday, December 16, 2015 9:09:19 AM

139981

Page 2

Item ID: D5374-3

Accept

N900040100

Setup Start

NS1

Revision ID: PRELIM

Stop

NS2

Item Name: Bushing

Start Date: 12/16/2015 Start Qty: 20.00

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Cust Item ID:

Required Date: 12/16/2015 Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC8- Inspect parts - second check

0.00

120

QC

Memo

0.01

Quality Control

POSITIVE RECALL

EFFECTIVE AS OF DEC 16 2015 AUTH MLJ

RELEASED 389 DATE 16-01-27

Rev A.

(20)

DAS
38
9-89

JAN 05 2016

130

Identify as per dwg & Stock Location: 57163 0.00

130

Packaging

Memo

0.00

Packaging

(20)

DAS
38
9-89

JAN 05 2016

140

QC21- Final Inspection - Work Order Release 0.00

140

QC

Memo

0.03

Quality Control

MLJ

JAN 27 2016

16-1-27

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause		FAULT CATEGORY					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : ☐	

Picklist Print

Wednesday, December 16, 2015 9:09:24 AM

Page 1

Work Order ID: 139981

139981

Parent Item: D5374-3

D5374-3

Parent Item Name: Bushing

Start Date: 12/16/2015

Required Date: 12/16/2015

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP REV:A NEW ISSUE 15-12-10 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303R0.500		Purchased	No				f	26.1100		3.852632			

M303R0 500

303 Round Bar 0.500"

**

Location

Loc Qty

Loc Code

MAT

26.11

m133038

24.78

m133265

1.33

3.853 ⁹¹ DAS
45 2015-12-16
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

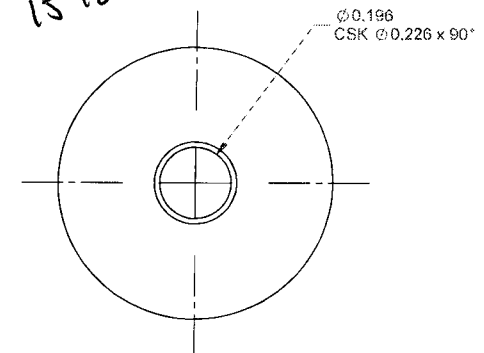
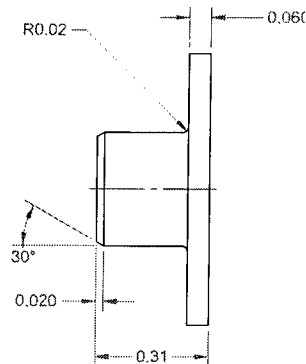
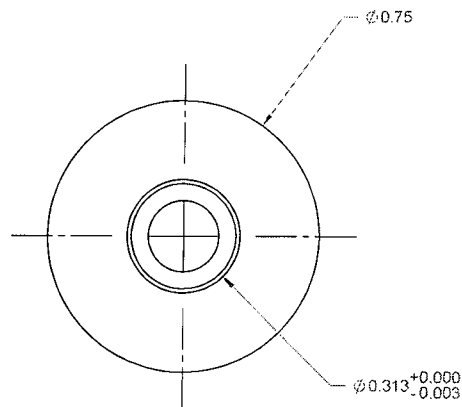
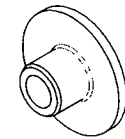
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____							
Misidentified ☐	☐ Past Due								

PRELIMINARY ISSUE

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 139981 MWS



D5374-1 BUSHING

PRELIMINARY ISSUE

15.12.16 RF

NOTES:

- 1) MATERIAL: AISI 303 SS ROUND BAR
ASTM A582
OR AISI 304/316 SS ROUND BAR
PER ASTM A276
REF DART SPEC M303R OR M304R

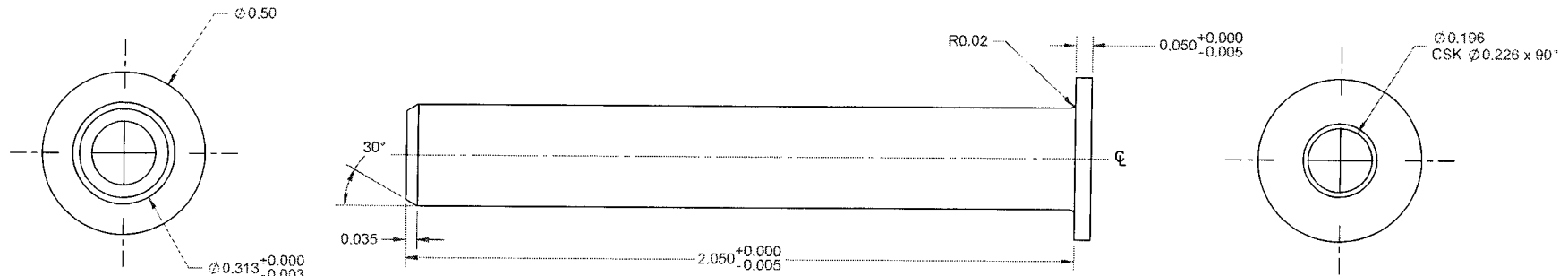
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.7
- 7) WEIGHT: 0.01 lbs

APPROVED

APPROVED

A	NEW ISSUE		RF	15.12.03
REV.	DESCRIPTION			BY DATE
DESIGN	RF	DART AEROSPACE USA, INC.		
DRAWN	RF	EUGENE, OR		
CHECKED	AK	DRAWING NO.	REV. A	
MFG. APPR.	JLM	D5374		SHEET 1 OF 2
APPROVED	HS	TITLE	SCALE	
DE APPR.	DS	BUSHING	NTS	
DATE	15.12.03	COPYRIGHT © 2015 BY DART AEROSPACE USA, INC.		
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PRELIMINARY ISSUE



D5374-3 BUSHING

NOTES:

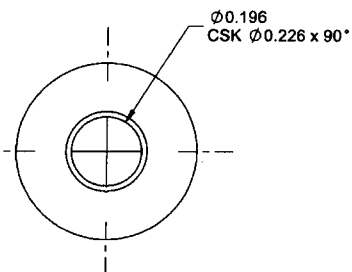
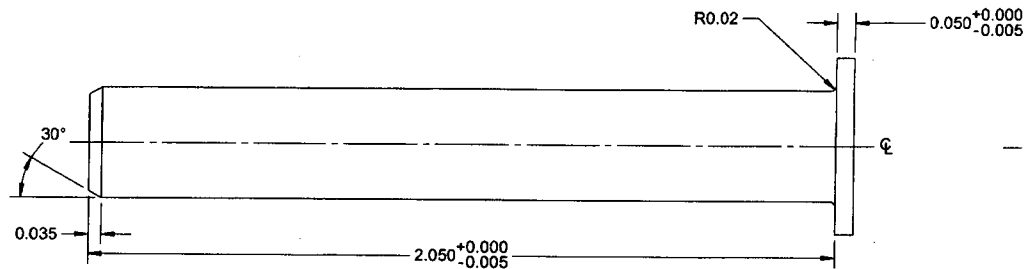
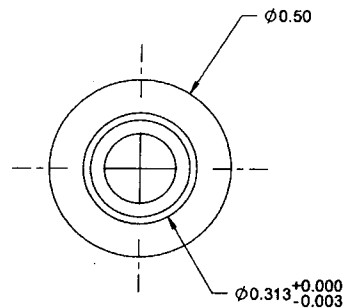
- 1) MATERIAL: AISI 303 SS ROUND BAR
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OR AISI 304/316 SS ROUND BAR
PER ASTM A276
REF DART SPEC M303R OR M304R
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.7
- 7) WEIGHT: 0.03 lbs

PRELIMINARY ISSUE

15.12.16 RF

APPROVED

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	EUGENE, OR	
CHECKED	AK	DRAWING NO.	REV. A
MFG. APPR.	JLM	D5374	SHEET 2 OF 2
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	BUSHING	NTS
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D5374-3 BUSHING

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- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.7
- 7) WEIGHT: 0.03 lbs

RELEASED
2016-01-21

APPROVED

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	EUGENE, OR	
CHECKED	AK	DRAWING NO.	REV. A
MFG. APPR.	JLM	D5374	SHEET 2 OF 2
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	BUSHING	NTS
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